

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>2003P07040WO</b>		FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/EP2004/050782</b>	International filing date (day/month/year) <b>13.05.2004</b>	Priority date (day/month/year) <b>15.05.2003</b>	
International Patent Classification (IPC) or national classification and IPC			
Applicant <b>SIEMENS AKTIENGESELLSCHAFT</b>			

  

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>5</u> sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																	
<p>4. This report contains indications relating to the following items:</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/> Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/> Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/> Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/> Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/> Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/> Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/> Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/> Box No. I	Basis of the report	<input type="checkbox"/> Box No. II	Priority	<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/> Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/> Box No. VI	Certain documents cited	<input type="checkbox"/> Box No. VII	Certain defects in the international application	<input type="checkbox"/> Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/050782

Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-8 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 2-7 \_\_\_\_\_ received by this Authority on 04.01.2005 with letter of 29.12.2004
- nos.\* 1, 8 \_\_\_\_\_ received by this Authority on 21.04.2005 with letter of 21.04.2005
- ☒ the drawings:
- sheets 1/1 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-8	YES
	Claims		NO
Inventive step (IS)	Claims	1-8	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

This report makes reference to the following documents, which were cited in the search report:

D1: EP-A-1 087576 (NORTEL NETWORKS LTD)

28 March 2001 (2001-03-28)

D2: EP-A-1 035 751 (LUCENT TECHNOLOGIES INC)

13 September 2000 (2000-09-13)

1. The present invention is defined as follows: (0) "process (claim 1) for traffic load redistribution in response to traffic overload in a packet-based network", wherein (1) "at least some of the packets which, in the event of unchanged load distribution, would be directed via an outgoing link are directed to one or a plurality of other outgoing links from the node which are associated with the same path array" and (2) "if traffic load redistribution does not succeed in reducing the traffic load below the upper limit without leading to another upper limit being exceeded on a link outgoing from the node", (3) "a message is sent to an upstream node requesting a reduction in the traffic load" and (4) "the message as per (3)

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>leads to an actual reduction in the said traffic load".</p> <p>The present application further contains a device (claim 8) which is defined by features corresponding to the process features (0) and (2)-(4) of claim 1.</p> <p>Dependent claims 2-7 define further details pertaining to implementation of the process as per claim 1.</p> <p>2. EP-A-1087576 (D1), which represents the prior art, defines a process for traffic load redistribution such that traffic load redistribution takes place automatically if an upper limit is exceeded by the traffic volume.</p> <p>3. The difference between the subject matter of claims 1 and 8 and D1 consists in features (2)-(4) in 1. above. <b>The subject matter of claims 1 and 8 (and the associated dependent claims 2-7) is therefore novel (PCT Article 33(2)) a fortiori.</b></p> <p>4. The objective problem addressed by the present invention consists in: (a) "improvement of the process for traffic load reduction at a node by traffic load redistribution if traffic load redistribution at the node itself does not succeed in reducing traffic load at this node below the upper limit without leading to another upper limit being exceeded on a link outgoing from this node".</p>

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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5. The objective problem (a) is solved by process steps (2)-(4) since 3.-4. above indicate how, if (cf. step (2)) traffic load redistribution fails, traffic load can nevertheless be reduced at a node and thus show how, even in the case described in the objective problem (a), traffic load can be reduced at a node. The solution therefore corresponds to a possible solution of the objective problem (a).

Since the solution of objective problem (a) as per features (2)-(4) cannot be deduced directly, clearly or completely from the prior art (D1) and since features (2)-(4) are contained in both claim 1 and claim 8, **the subject matter of claims 1 and 8 (and the associated dependent claims 2-7) therefore involves an inventive step (PCT Article 33(3) a fortiori.**

6. Since claims 1-8 relate to technical processes (claims 1-7) or a technical device (claim 8) which can be realized using commercially available resources for processing, transmitting and storing information, **the technical processes defined (claims 1-7) and the technical device (claim 8) are industrially applicable. Therefore, the requirements of PCT Article 33(4) are met.**

**Further note concerning the present application**

1. Pursuant to PCT Rule 5.1 (a)(ii), the description

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should have cited D1 and D2 and briefly outlined  
the relevant prior art contained therein.